

## NOTES ON THE BUTTERFLIES OF THE NAGALAPURAM HILLS, EASTERN GHATS

BY

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During the two years from April 1950 until the end of February 1952, I paid frequent visits to the Nagalapuram Hills which form the outer spur of the Eastern Ghats between Nagari and Kalahasti. These hills extend for about 30 miles from south to north, the southernmost end being about 40 miles NW. of Madras City.

These hills are, as far as I know completely uninhabited and are covered with thick jungle, the southern end being bare rocky peaks. There are no signs of grazing goats or cattle but there are numerous tracks of sambar and barking deer on the forest paths; judging from the droppings and pug marks there must be a number of sloth bears and panthers and on one occasion I saw a couple in the early morning. The Grey Junglefowl is fairly common and I have also seen an occasional spurfowl.

The highest point is Kumbakkam Drug (about 2,700 ft.) and just below this is an unattended Forest Bungalow. But it is a long hard walk of 5 miles from the Government Fish Farm at Thantipandal and without careful arrangements made well before hand it is impossible to obtain coolies to carry one's baggage to the top of the hill.

There is no fresh running water on the plateau except in the monsoon, but there are two small pools—one about one mile to the north of the bungalow and another  $1\frac{1}{2}$  miles to the west. The first 2 miles from Thantipandal the ascent is very steep to about 1,900 ft., thereafter the path is along a rolling plateau gradually ascending to 2,500 ft.

Around the northern edge of the hills is a small clear stream with a permanent flow of water which appears to emanate from a spring halfway up the hill. The jungle round the bottom of the hills is thick scrub with some big mango and other trees and some patches of bamboo jungle. This stream flows into a small artificial tank.

Most of my collecting was done on the northern end of the hills as the southern and central parts are not easily accessible, at any rate for short visits.

The rainy season is from mid-October to the end of November, but there are frequent heavy showers from July to September.

There is one point which seems to me of particular interest and this is the scarcity of females of *Papilio polytes* compared to the very large number of males. In the two years spent among these hills, I certainly did not see more than 12 females, all of form *stichius*. This in itself seems peculiar as *P. aristolochiae* which *stichius* mimics is comparatively scarce while *P. hector*, which the typical form mimics, is the commonest *Papilio* and hundreds and even thousands are seen every day. It is possible that I may have missed form *polytes* and passed them as *hector*, but I can usually distinguish between the two in flight and was always on the lookout for them.

## PAPILIONIDAE

1. **Polydorus aristolochiae aristolochiae.**

Rather scarce, but usually three or four to be seen every day.

2. **Polydorus Hector.**

Very common at all seasons, round the lower slopes of the hills, but scarce at the top. This is one of the commonest species and is often seen in swarms of hundreds.

3. **Papilio polytes polytes.**

Males fairly common from August to November but scarce at other times. On the 9th September 1950 after a week of heavy showers males of this butterfly appeared literally in thousands on wet ashes. There had been a forest fire along the banks of the stream and these patches of ashes were covered with hundreds of butterflies, the commonest being *P. polytes*, *P. demoleus*, *G. nomius*, *G. eurypylus jason*, *C. pomona*, *C. nerissa*, *A. libythea*. Among the *P. polytes* was a male which had distinct light blue scaling on lower h.w. between the discal series of white spots and the discal edge of the wings in interspaces 1-7. The underside of the h.w. had a series of small blue lunules under the discal series of white spots. This butterfly was quite conspicuous among a crowd of about 40 *P. polytes* hovering and settled over wet ash. Now after 18 months the set specimen still shows the unusual markings though they have faded somewhat.

Females of all forms are scarce and during the whole two years not more than 12 of form *stichius* were seen and none of the other forms.

4. **Papilio polymnestor.**

Only one was seen in July flying down the river, but the wings of another were seen floating in a pool at the end of June.

5. **Papilio crino.**

Scarce at most times of the year but saw one in November and took another early in December on thistle. The next time this butterfly was seen was at the top of the hill in April when 9 were seen round the summit of Kumbakkam Hill. No others seen except at the top of the hill in August.

6. **Papilio demoleus demoleus.**

Very common everywhere and at all times of the year.

7. **Chilasa clytia clytia.**

Scarce—only one tattered specimen seen at the bottom of the hill, but always one or two to be found round the summit. These vary in colour from almost black to a rusty brown.

8. **Chilasa clytia dissimilis.**

Scarcer than *clytia clytia*, and only seen round the summit of Kumbakkam.

9. **Graphium agamemnon menides.**

Scarce at all times—a few seen in August near the top of the hill and others on lantana.

10. **Graphium teredon sarpedon.**

Very scarce—a few taken on damp rock near a spring on the top of the hill in October.

11. **Graphium eurypylus f. jason.**

Very common at the bottom of the hill along the stream, especially from August to January. They come to damp patches in numbers and are easy to catch when settled but are very rapid fliers.

12. **Graphium nomius nomius.**

Fairly common in July only but these have been seen throughout the year. On the 25th July there were hundreds newly hatched, whereas on the 9th August only one was seen and again in early September only one was seen.

PIERIDAE

1. **Leptosia nina nina.**

Not common, but a few seen in wooded areas on the lower slopes of the hill.

2. **Delias eucharis.**

Rather scarce but usually a few to be seen most days.

3. **Appias libythea libythea.**

Males common at most times of the year, but females scarce.

4. **Appias albina.**

Scarce, but a few males taken on wet patches of sand.

5. **Catopsilia crocale.**

Males fairly common, but females very scarce—only two seen over the entire period.

6. **Catopsilia pomona.**

Very common.

7. **Catopsilia pomona f. catilla.**

Only one seen and taken.

8. **Catopsilia pyranthe.**

Common.

9. **Eurema libythea.**

Scarce.

10. **Eurema hecabe simulata.**  
Scarce.
11. **Cepora nerissa phryne.**  
Very common.
12. **Ixias pyrene frequens.**  
Rather scarce, but usually a few to be seen at the bottom of the hill and along the stream.
13. **Ixias marianne.**  
As above.
14. **Anapheis mesentina.**  
Usually very scarce except on one day in September when there were hundreds about and many pairs were seen *in copula*.
15. **Colotis amata amata.**  
Scarce, but always one or two to be seen on most days.
16. **Colotis etrida.**  
Fairly common in the scrub jungle at the foot of the hill.
17. **Colotis danae.**  
Common in scrub jungle at the foot of the hills.
18. **Colotis faustia fulvia.**  
Fairly common in same places as *etrida* and *danae*.
19. **Colotis modesta modesta.**  
A few seen as above.
20. **Valeria valeria hippia.**  
Very scarce indeed and only three seen in the entire period, all males.
21. **Valeria ceylonica.**  
One only seen and taken.

## DANAIDAE

1. **Danais limniace mutina.**  
Common at all seasons.
2. **Danais plexippus.**  
Very common.
3. **Danais chrysippus.**  
Very scarce—only a dozen or so seen during the entire period.

4. **Euploea core core.**

Very common.

5. **Euploea coreta coreta.**

Very common.

*Note.*—These two *Euploea*s are both about equally distributed.

## SATYRIDAE

1. **Mycalesis perseus.**

Very scarce.

2. **Lethe rohria nilgiriensis.**

Only one seen at the top of the hill round damp rocky outcrops.

3. **Ypthima hubneri.**

Common round the foot of the hill.

4. **Melanitis leda ismene.**

Very scarce.

## ERYCINIDAE

1. **Abisara echerius prunosa.**

Very scarce.

2. **Libythea myrrha myrrha.**

Very scarce—only three seen.

## NYMPHALIDAE

1. **Charaxes polyxima imna.**

Fairly common round the peak of the hill at midday. One male was seen on fresh bear droppings. No females seen at any time.

2. **Charaxes fabius fabius.**

A few seen at the peak and others at the bottom of the hill on rocks by the stream.

3. **Eriboea athamas.**

Common at the peak and in several places on the rocks in the middle of the stream.

4. **Euthalia nais.**

Fairly common all over the area.

5. **Limenitis procris procris.**

Scarce. A few seen at higher elevations.

6. **Neptis columella.**

Common at higher elevations.

7. **Neptis hylas varmona.**  
Common throughout the area.
8. **Rahinda hordonia.**  
Scarce, but usually one or two at the foot of the hills.
9. **Precis hierta hierta.**  
Fairly common.
10. **Precis lemonias vaisya.**  
Common.
11. **Precis iphita pluvialis.**  
Common.
12. **Precis almana almana.**  
Very scarce—only two seen near the stream.
13. **Precis orithiya.**  
Common everywhere.
14. **Vanessa cardui.**  
Only two seen.
15. **Hypolimnias bolina.**  
Very scarce—no males seen.
16. **Hypolimnias missipus.**  
Males very scarce—all but one seen being in the jungle at the bottom of the hill and near the stream. No females were seen in this locality but they were quite plentiful near the hill-top where only one tattered male was seen.
17. **Atella phalanta.**  
Very common.
18. **Ergolis merione taprobana**  
Very common.
19. **Ergolis ariadne.**  
Common.
20. **Telchinia violae.**  
Very common everywhere.
21. **Biblia ilythea.**  
Rare, but there were several on the banks of a small tank into which the stream empties about 2 miles from the foot of the hills.

## LYCAENIDAE

1. **Castalius rosimon rosimon.**  
Not rare, usually one or two to be seen at low levels.
2. **Castalius deleta decidea.**  
Very scarce—only three taken in two years.
3. **Spalgis epius.**  
Scarce—a few near the stream.
4. **Talicauda nyseus.**  
A single one taken near the summit of Kumbakkam in September.  
No others seen.
5. **Syntarucus plinius.**  
Scarce—two near the stream and others on the main road in July and August.
6. **Lycaenopsis puspa gisca.**  
Fairly common at low level.
7. **Chilades laius laius.**  
Very common at low levels, July to October. Sometimes swarms at damp patches on the forest road.
8. **Zizeeria trochilus putli.**  
Common.
9. **Zizeeria lysimon.**  
Common.
10. **Zizeeria otis decreta.**  
Scarce.
11. **Euchrysops cnejus.**  
One only on the plateau at 12,000 ft., October.
12. **Lycaenesthes lycaenina lycaenina.**  
Two at hill-top near a small spring of water.
13. **Catachrysops strabo.**  
Common.
14. **Lampides boeticus.**  
Scarce—only one taken near hill-top, but others seen.
15. **Jamides celeno celeno.**  
Scarce—females particularly so. All seemed to be of very pale colour.

16. **Curetis thetis.**

Males fairly common—only two females seen.

17. **Horsfieldia anita dina.**

Fairly common on the banks of the stream, July to September. Not seen elsewhere.

18. **Amblypodia amantes amantes.**

Common, particularly on the plateau. Males sometimes came to damp sand.

19. **Surendra quercetorum biplagiata.**

Fairly common.

20. **Loxura atymnus atymnus.**

Very scarce—only two, both in October.

21. **Apharitis lilacinus.**

Only one taken in February near Kumbakkam peak.

22. **Spindasis vulcanus vulcanus.**

Fairly common in April on the plateau. Also seen in September and October.

23. **Spindasis ictis ictis.**

Two poor specimens taken in April—no others seen.

24. **Tajuria cippus cippus.**

Several on the top of the hill in August. Two taken in the valley in November. No others seen.

25. **Rathinda amor.**

Common August to October, but very small compared to Bombay specimens.

26. **Rapala melampus.**

Two males seen and one taken in December in valley.

*Note.*—I have three more lycaenids which I have been unable to identify so far.

## HESPERIIDAE

1. **Hasora alexis alexis.**

Only one taken but several seen in October, November and December.

2. **Badamia exclamationis.**

Fairly common.

3. **Calaenorrhinus ambareesa.**

Three only, all in October.

4. **Calaenorrhinus leucocera leucocera.**

Two only in November.



5. **Tagiades litigiosa litigiosa.**  
Only one in October.
6. **Coladenia dan dan.**  
Common.
7. **Coladenia indrana indra.**  
Fairly common.
8. **Tapena thwaitesi hampsoni.**  
Only one taken in November, and another seen the same day.
9. **Caprona ransonetti ransonetti.**  
Common.
10. **Caprona agama pelias.**  
Only one taken in July.
11. **Syrichthus galba.**  
Fairly common.
12. **Ampittia diascorides.**  
Scarce.
13. **Aeromachus dubius.**  
Two taken in October.
14. **Suastus gremius gremius.**  
Three taken in October.
15. **Udaspes folus.**  
Only one taken in October.
16. **Notocrypta paralysos alysia.**  
Common.
17. **Gangara thyrsis thyrsis.**  
Seen twice October, but missed each time.
18. **Taractocera ceramus ceramus.**  
Common.
19. **Astycus pythias lanka.**  
Only two taken in March and May.
20. **Baoris kumara kumara.**  
Only one in April.
21. **Baoris zelleri cinnara.**  
Fairly common.

*Note.*—There are two more specimens which I cannot identify with certainty.